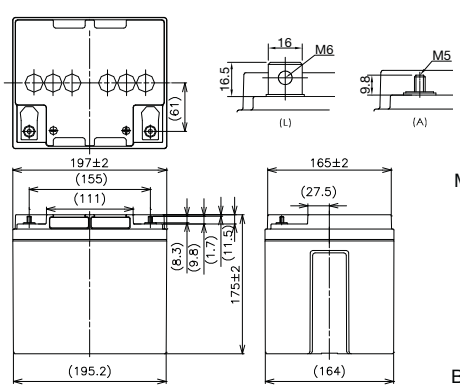
LC-X1242P/AP*1

For standby power supplies.
Expected trickle design life: 10 – 12 years at 20°C according to Eurobat.

Contents indicated (including the recycle marking, etc.) are subject to change without notice.

Dimensions (mm)



Terminal type (option):

LC-X1242P: M6 bolt and nut

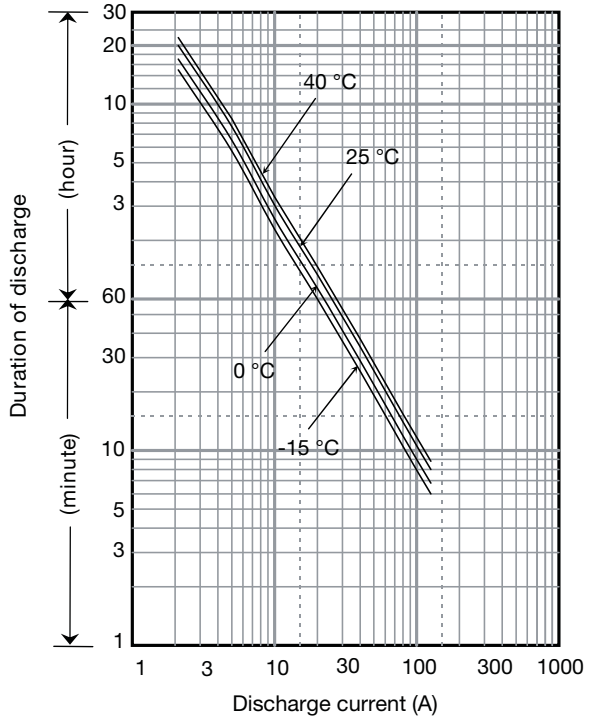
LC-X1242AP: M5 threaded post

Battery case resin: standard (UL94HB)

Specifications

Nominal voltage		12V
Nominal capacity (20 hour rate)		42Ah
Dimensions	Length	197mm
	Width	165mm
	Height	175mm
	Total Height	LC-X1242P: 180mm LC-X1242AP: 175mm
Approx. mass		16kg
Terminal		M6 Bolt and Nut type/ M5 threaded post

Duration of discharge vs Discharge current



Characteristics

Capacity (25°C)	20 hour rate 10 hour rate 5 hour rate 1 hour rate	42Ah 40Ah 37Ah 26Ah
Internal resistance	Fully charged battery (25°C)	8mΩ
Temperature dependency of capacity (20 hour rate)	40°C 25°C 0°C -15°C	102% 100% 85% 65%
Self discharge (25°C)	After 3 months After 6 months After 12 months	91% 82% 64%

Watt Table

(Wattage/Battery)

Cut-off V	3min	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	10h	20h	24h
9.6V	1846	1483	1254	966	835	625	410	312	241	187	132	110	89.9	79.1	48.0	25.2	21.0
9.9V	1701	1405	1232	966	824	607	407	310	234	186	130	109	88.7	79.1	48.0	25.2	21.0
10.2V	1612	1327	1210	943	812	596	406	307	217	184	127	108	88.7	77.9	48.0	25.2	21.0
10.5V	1590	1249	1176	920	800	585	405	306	211	184	126	108	88.7	77.9	48.0	25.2	21.0
10.8V	1449	1215	1086	886	777	573	390	295	201	173	121	105	87.5	75.5	48.0	25.2	20.8

Ampere Table

(Ampere/Battery)

Cut-off V	3min	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	10h	20h	24h
9.6V	166	133	112	84	72	53.4	34.9	26.5	20.4	15.8	11.1	9.2	7.5	6.6	4.0	2.1	1.75
9.9V	153	126	110	84	71	51.9	34.7	26.3	19.8	15.7	10.9	9.1	7.4	6.6	4.0	2.1	1.75
10.2V	145	119	108	82	70	50.9	34.6	26.1	18.4	15.5	10.7	9.0	7.4	6.5	4.0	2.1	1.75
10.5V	143	112	105	80	69	50.0	34.5	26.0	17.9	15.5	10.6	9.0	7.4	6.5	4.0	2.1	1.75
10.8V	130	109	97	77	67	49.0	33.2	25.0	17.0	14.6	10.2	8.8	7.3	6.3	4.0	2.1	1.73

*1 This battery is also available with a flame retardant battery case resin (UL94 V-0).

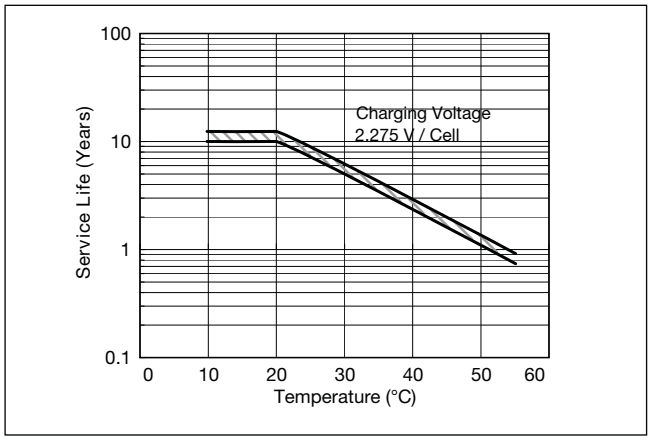
Charging Method

Trickle use	Control voltage: 13.6 - 13.8V; Initial current: 6.3A or smaller

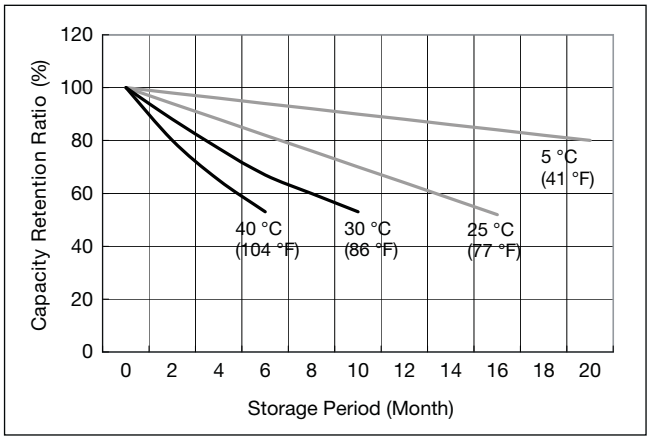
Cut off voltage

Discharge current	2.1A - 8.4A	8.4A - 21A	21A - 42A	42A - 84A	84A - 126A
Cut off voltage (V)	10.5	10.2	9.9	9.3	8.7

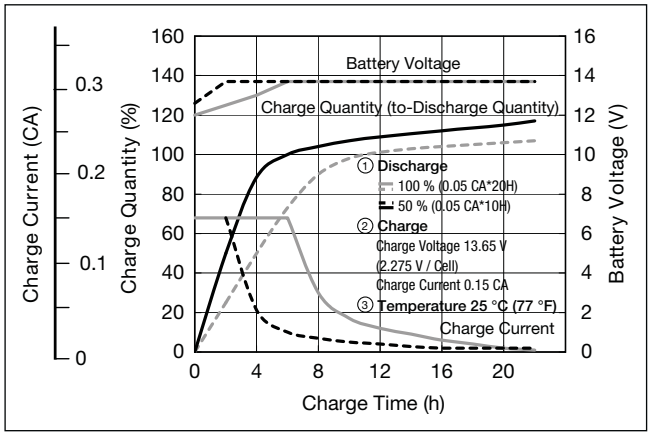
Influence of Temperature on Trickle life



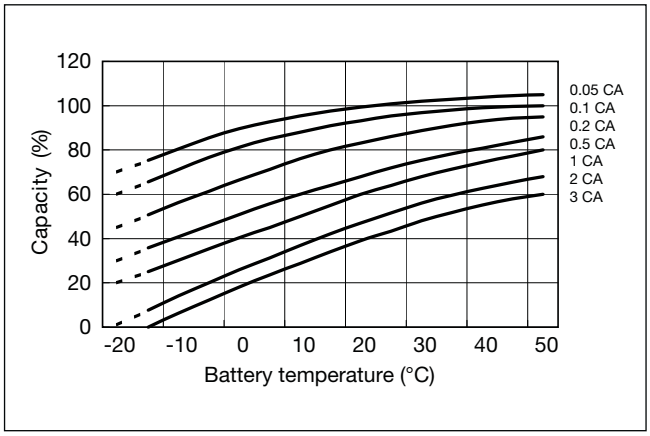
Residual capacity vs storage period



Constant-voltage and constant-current charge characteristics for Trickle use



Discharge capacity by temperature and by discharge current



Discharge characteristics